Last Name: _____

First Name: _____

Student ID: _____

Quiz 10 (A)

Question 1. *(4 marks)* Do the planes $2x - 3y + 8z - 2 = 0$ and $3x + 5y + 9z - 12 = 0$ intersect? If so find the intersection.

Question 2. *(2 marks)* Find the equations of the line that passes through the point $P(3, -4, 0)$ and is parallel to both planes in question 1.

Question 3. *(4 marks)* Find the equation of the plane containing the lines
$(x, y, z) = (3 + 7t, 4 + 2t, 1 - t)$ and $(x, y, z) = (7t, -2 + 2t, 5 - t)$